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Financial Controlling in Service Enterprises – Key Tools and Indicators Facilitating Decision-Making Process with Particular Emphasis on Improving Financial Condition

Abstract: The aim of the paper is to identify and systematize the key tools and indicators for financial controlling in service enterprises which facilitate the effective management decision-making process especially during improving the financial condition of a company. It turns out that some of the indexes do not reflect the specifics and financial condition of an organization. Moreover, some indicators analyzed in isolation from others and without in-depth context taken into account (e.g. business environment) may lead to false conclusions that result in wrong decisions. Along with the growing importance of service companies (including Knowledge-Intensive Business Services), as well as the emergence of industrial and organizational crises, the importance of systematic financial controlling process grows. Based on the narrative literature review and experiences from the construction industry crisis in Poland in 2009–2018, a model of financial controlling system in a service enterprise, based on key indicators and tools was created. The model was based on three perspectives: historical reporting, maintaining the continuity of the company in a crisis situation as well as development and improving a competitive position of a company. The paper provides two contributions to the financial controlling in service enterprises. First, it provides a comprehensive approach to financial controlling by integrating the most crucial tools and indicators useful during the after-crisis recovery process of a company. Second, it proposes a theoretical model of financial controlling in service companies.
Key words: controlling, financial controlling, financial indicators, management accounting, crisis management, service enterprises, financial management of enterprises

Introduction

A service company, operating in an industry such as the construction industry, requires a special approach on the aspect of financial management. The current understanding of this research area focused mainly on bringing it to financial accounting, financial reporting, and at best to the elements of management accounting. Moreover, management accounting tends to be reduced to quantitative methods that are mainly used only in production activities. However, such topics as the technical cost of manufacturing, calculating the costs of average operations or determining the break-even point for single or multi-assortment production, characteristic of manufacturing industries, are often difficult to implement into service activities. The utilitarian aspect of similar methods and techniques is therefore strongly limited for business activities based on specialized employees in particular in the case of knowledge-intensive business services – KIBS [Bohatkiewicz, Gancarczyk, Dileo 2017, pp. 469–487]. Due to the intangible nature of the activity nad main resources (mainly human capital), as well as the nature of the "production process of services", it is necessary to apply other methods of financial management. The literature on the subject indicates here a number of indicators for financial analysis and financial controlling. However, there is no critical analysis of the utilitarianity of these indicators in economic practice, as well as the assessment of the reliability of the results obtained. It turns out that some of the indexes indicated do not reflect the specifics and financial condition of the organization, and even some indicators analyzed in isolation from others and without context taken into account (e.g. business environment) may lead to wrong conclusions. This in turn may result in making wrong management decisions. Along with the growing importance of service companies (including Knowledge -Intensive Business Services), as well as the emergence of industrial and organizational crises, the importance of systematic financial controlling process grows.

At the same time, the recent economic crisis in the construction industry in 2012–2015 in Poland clearly demonstrated the role of financial directors, controllers and financial analysts. The crisis affected the profitability of projects, resulted in reduced revenues and financial liquidity of the companies, which in turn led to the bankruptcy of enterprises. Companies that had financial reserves and had at least elements of financial controlling processes, had to reduce the activity and costs, including employment, yet managed to survive on the market. The difficult situation in the entire industry has highlighted the importance of an effective management information system and the process of financial controlling, adequately matched with indicators to the nature of operations and strategic goals of an organization.

The aim of the paper is to identify and systematize the key tools and indicators for financial controlling in service enterprises which facilitate the effective management decision making process especially during improving the financial condition of a company.

The article is a conceptual review and based on a review of literature from the crisis of the construction industry in Poland in 2012–2018. The paper provides two contributions to the to the current literature in the field of management accounting and financial controlling in service enterprises. First, it provides a comprehensive approach to financial controlling by integrating the most crucial tools and indicators useful during after-crisis recovery process of a company. Second, it proposes a theoretical model of financial controlling in service companies. The model was based on three perspectives: historical reporting, maintaining the continuity of the company in a crisis situation as well as development and improving a competitive position of a company.

The value of work can be its utilitarian character, consisting in the possibility of building a controlling system of a service enterprise based on key indicators and tools that reliably present the financial condition of an enterprise and enable effective and effective management decisions to be taken in each of the company's specific prospects.

Financial Controlling – concept

The term "controlling" comes from "control" and is understood as management, control, and regulation of the activity [Naruć 2013, p. 33]. It is one of the organizational management subsystems, focused on "obtaining information and data, planning and controlling the operations of the enterprise" [Karmańska 2006, pp. 457–459; Naruć 2013, pp. 33–34]. Controlling is essentially divided into strategic controlling, which serves the management of planning and control processes at the strategic level of business management [Strużycki 2002, p. 376] and operational control of the company's control and management processes in the short term [Woźniak 2008, pp. 26–27] between which feedback occurs. Financial controlling is focused on controlling the processes of data and financial information management in order to create the optimal decision environment at the strategic and operational levels. It essentially involves one of the management functions of planning, including forecasting, creating strategic, tactical and operational plans, along with continuous evaluation of achieving the company's goals [Naruć, Nowak, Wieloch 2008, p. 33; Stoner, Freeman, Gilberth 2001, p. 25, 263]. It is a part of strategic and operational controlling in addition to such types as: investment, production, logistics, marketing, sales, research and development, personnel, quality and ecological controlling [Karmańska 2006, p. 475]. This term is sometimes used interchangeably with the term "controlling", but it should be pointed out that their scope and functions overlap only partially [Leszczyński, Wnuk-Pel 2010, p. 639]. Utilitarian nature of financial controlling is therefore based on the fact that the results of this activity are to support the decision-making process aimed at achieving the company's goals [Kowalak 2013, p. 8].

Tools and indicators used in the ex *post* analysis – historical reporting

Financial controlling in a service enterprise starts with an analysis of individual cost categories. According to the Accounting Act dated 29 September 1994, costs are defined as "probable decreases in the reporting period of economic benefits, with a reliably determined value, in the form of a decrease in the value of assets, or an increase in the value of liabilities and provisions that will lead to a decrease in equity or increase its shortfall in a different way than withdrawal of funds by shareholders or owners". Cost according to Cebrowska [2005, p. 525] is "value of resources (factors of activity) expressed in value, incurred in order to obtain a specific useful effect, e.g. product, semi-finished product or service". It is a factor influencing the financial results of the organization. At the same time, the expense is "any reduction in the company's cash, regardless of the purpose of their incurring" [Woźniak 2008, p. 101].

The most common cost classifications by type are among others: depreciation, wages, consumption of materials and energy, external services, taxes and fees, social security and other benefits, other types of costs), final products (direct and indirect costs), cost centers (e.g. costs of individual organizational departments, e.g. production costs, costs of sales, marketing, controlling etc.), performed function in the enterprise (e.g. design, production, supply, distribution, sales), reaction to changes in the size of activity (fixed, variable), type of economic activity (financial, operational, investment), structure and economic content (simple and complex costs), control possibilities (controllable, uncontrolled), postulated costs (planned, standard), period they are assigned to (current period, future period), tax dependency (tax-deductible costs and not tax-deductible) [Naruć 2013, pp. 47–48]. It is particularly useful to divide them into the following groups:

- Fixed costs, including rent, energy, telecommunications, accounting, IT, legal, accounting services, property insurance, third party liability insurance, cleaning, maintenance services etc.
- Variable costs, depending on the number and size of projects being carried out and the number of employees,
- Remuneration costs divided into organizational departments (the level of aggregation in this case depends to a large extent on the function performed by specific groups of people in the organization or on the location within the organizational structure). Salaries are also divided into so-called remuneration of production employees and remuneration of auxiliary functions (administration and management).

The classical division into departmental costs and general management costs in practice may make analyzes and decisions more difficult. It is worth emphasizing that the costs of remuneration are usually classified as variable costs, i.e. dependent on the volume of production. In practice, however, these are fixed costs in the short term, and variables the long-term. It takes time to recruit and train new employees. Similarly, dismissing employees is usually associated with a period of notice, but in principle the higher their position in the hierarchy and the longer the seniority, the longer the period of notice. In addition, employment reduction may generate additional short-term costs in the form of, among others, severance pay, the equivalent of unused vacation time, which can often be a problem for companies in poor financial condition. At the same time, along with redundancies, there is a loss of production capacity, which makes an adequate level of income difficult to obtain.

Adopting the appropriate classification of costs is important due to conducting further analyzes and creating indicators (e.g. hourly rates). The classification should also allow to evaluate the progress in achieving strategic, operational and tactical goals resulting from the adopted strategy of the company. Cash flow perspective is also crucial – the actual turnover of cash, reflected in cash expenditure. For this reason, someone gathering financial data should pay particular attention to it and distinguish the concept of costs from expenses, as well as have information whether the data they receive are values from accounting perspective, market values or reflect cash turnover. In historical reporting, attention is paid to changes of individual cost items according to various classifications, e.g: fixed costs, salaries, overheads and departmental costs.

The classic financial analysis, including the evaluation of the development of indicators from such groups as indicators of the structure of assets and their dynamics, financial liquidity, profitability or debt, does not play a key role in controlling. First of all, basing on historical data (typical *ex post* analysis) does not solely provide reliable prognosis for the future e.g. in forseeing an industry crisis. An *ex ante* analyzes and ongoing systematic assessment the financial conditio is required. Nevertheless, these indicators can and should be used as a kind of complement to the financial controlling system of a service company. Their utilitarianity will often be reduced to the possibility of reporting the historical status and to assess the degree of fulfillment of the assumed financial strategic plans of the enterprise.

Tools and indicators used to maintain the continuity of the service company

The most important aspects of this area are financial liquidity and debt management. These two factors mainly determine the continuity of the service enterprise on the market from financial point of view.

Financial liquidity or the ability to timely pay liabilities [Gorczyńska, Wieczorek-Kosmala, Znaniecka 2008, p. 62; Jerzemowska 2006, p. 135, Gabrusewicz 2005, pp. 256–257; Cicirko 2010, pp. 11–13, Kowalska 2013, pp. 223–224] – its maintenance and cash management becomes the first priority issue, in particular the emergence of the financial crisis [Kowalska 2013, p. 223]. It is assumed that the loss of financial liquidity is the main reason and introduction to the bankruptcy of the enterprise [Sierpińska, Wędzki 1997, p. 7].

In the event of a threat to financial liquidity of a service company and lack of systematic financial controlling, one of the first, simplest analyzes are daily analyzes:

- Bank accounts balance,
- VAT accounts balance,
- Guarantee limits (e.g. for performance guarantee for the proper performance of the contract and tender deposits in the public procurement system),
- Factoring limits,
- Values of overdue invoices and receipts, preferably with aging of liabilities divided into 0–30 days, 31–60 days, 61–90 days, 91–180 days and over 180 days,
- Analysis of the possibility of payment of public and statutory charges, including: social security contributions, Value Added Tax, Personal Income Tax, other obligations,
- Analysis of the possibility of payment of expenses necessary to incur, which have priority in payment (e.g. remuneration, rent, energy, accounting, legal, IT services, etc.),
- Analysis of invoices and bills related to external services (costs of subcontractors: both natural and legal persons), which will be issued within the next 1–2 months.

One of the key tools while dealing with poor financial conditions, however, becomes a daily calendar of expenses and receipts, which allows one to conduct ongoing control of the company's cash supplies. If it is impossible to pay all the liabilities, it may be necessary to reach agreements and settlements with the creditors. The schedule of expenditures and receipts plays a key role here due to the necessary repayment planning (usually in parts, not on a one-off basis). Particularly in the case of large financial arrears, it is important to draw up a list of creditors and the amounts due to them. It is needed, among others, for tax purposes (VAT adjustment), reporting in, among others, restructuring processes (conducted by court or internally). The inventory of the overdue liabilities, payments of liabilities covered by agreements and settlements, and so-called disputable claims is necessary then. It is also an important source of information in the course of evaluating the change in the financial condition of an enterprise (liabilities covered by agreements and settlements in total liabilities or liabilities covered by agreements and settlements in total overdue liabilities).

It should be noted that, contrary to the widespread assessment of the negative situation of over-liquidity, which is usually supposed to improper use of financial resources, enterprises with periodic over-liquidity may have a better starting point and chance of recovering from the crisis thanks to their cash reserves (see: Toyota case).

The cycle of receivables in days may be useful for analyzing the rationality of commencement of operations aimed at obtaining factoring or related financial products. An analysis of the cycle of liabilities in days in the crisis situation is characteristic of the previous perspective (historical reporting), it seems to be less important for making management decisions. The more important information is received from the aging of liabilities together with an in-depth analysis of the type of costs that arise, which may become disputable claims or may pose a threat to the continued functioning of the enterprise. The daily analysis of expenses and the accompanying receipts also supports this process.

The next steps for controlling a financial service company include such analyzes as:

- The state of annual completion for the current year, i.e. the current projected revenue, resulting from contracts signed with clients in relation to the income resulting from the forecast of the profit and loss account (so-called pro forma profit and loss account),
- Annual state of annual completion for the following year.

In addition, among the indebtedness ratios worth applying in this area are: the sufficiency ratio of operating cash to repaying total debt, the general cash adequacy ratio, the repayment ratio of long-term liabilities, the ratio of immediately payable liabilities treasury ratio (cash coverage of liabilities immediately due).

Tools and indicators used to increase the level of competitiveness in the market and the development of the company after the crisis

When faced with the economic crisis in the industry and the difficult financial situation of the company, it is very easy to fall into the trap of focusing on the current financial difficulties, lack of cash and debt management. However, it is necessary that financial decision-makers also have the skills and tools to analyze the situation ahead, so that the fight against the crisis is not limited only to solving current problems, but part of a wider financial plan leading to the achievement of the organization's strategic goals.

The hourly rate plays the leading role in the operation of service companies. If the given service or market has a more aggressive pricing policy, and the companies operating on the market apply the lowest price strategy, hourly rate as an indicator of competitiveness is even more important. Hourly rate is understood as the employee's hourly cost of work, covering at least direct costs, and preferably total costs and margin. In the event of a price war, like the one which took place at the end of the first financing period of Europan Union for road construction industry in Poland in years 2009–2014, hourly rates tend to be undervalued. During Polish crisis in construction industry, hourly rates calculated in the bids prepared by the companies (both design and construction companies) that competed in tenders (public procurement system) were understated to such an extent that they barely covered direct costs. The ultimate goal was to servive on the market by acquiring a limited number of works with high competition and huge price pressure from other bidders who also balanced on the verge of bankruptcy. Unfortunately, such low levels of hourly rates resulted in further bankruptcies and extremely low prices on the market for future public tenders.

Another indicator is the share of external services (external costs) in total project costs. It is assumed that this index should not exceed 50%. However, the allowed limit may be higher due to, for example, project's projected profitability, desire to increase turnover and financial cash-flow plans. However, it should be noted that in the case of a company struggling with the effects of an industry crisis, a high proportion of external services in projects will pose a threat to maintaining short-term liquidity.

At the same time, the ratio of remuneration costs to total costs also plays an important role in determining the level of knowledge-insivity of the enterprise (company based on intellectual capital, treated as a key source of competitive advantage), but also indicates the level of risk of business activity. If the costs of remuneration constitute a significant component of total costs (50% and more), each price pressure on the labor market will cause the significant increase in salary costs regardless of the production volume. At the same time, these costs, as already indicated, are not easily reducible in a short period of time. Moreover, employment reduction may result in external costs such as departures of subsequent employees, loss of production potential difficult to restore in a short period of time.

In addition to specifying the planned break-even point based on projected revenues and costs, it is important to undertake a bankruptcy risk analysis, which can be undertaken in a number of ways [Antonowicz, Antonowicz 2009, pp. 210–218], among others on the basis of the point assessment model of bankruptcy risk according to E. Mączyńska, M. Zawadzki, M. Żuchowski and J. Janka [Mączyńska 2004, pp. 107–117] or according to the so-called "poznański model" according to M. Hamrol, B. Czajka and M. Piechocki [Hamrol, Czajka, Piechocki 2004, pp. 35–39]. In order to analyze the threat of insolvency, various indicators are used, which often benefit from historical reporting. These will be: return on equity, total assets profitability, equity to foreigner ratio, share of working capital in total assets, current liquidity, burden on financial surplus, general debt, working capital turnover [Korol 2013, p. 53; Wędzki 2003, p. 283; Prusak 2005, p. 113]. Generally speaking, however, the lower financial liquidity, the greater the share of external financing (foreign capital) and the higher the operating costs in working capital, the higher risk of bankruptcy is [Adamus 2015, p. 44, Korol 2013, p. 53].

Financial controlling model in a service enterprise

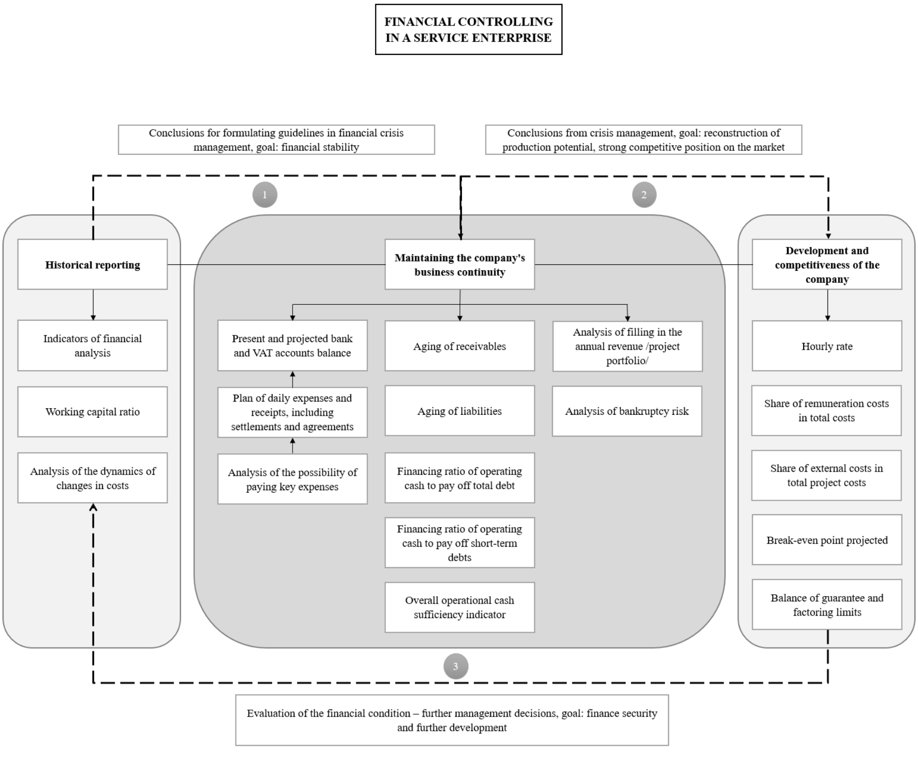
As indicated in the introduction, financial controlling of service companies, in particular those in a difficult financial situation, requires a different approach from that known from manufacturing companies. Figure 1 shows a model of such a process in a service enterprise. The analysis basically involves three-time perspectives, i.e.:

1. refers to the past (*ex post* analysis) - historical reporting,
2. present (*ex tepora* analysis) – leading to the continuity of the company's operation in a turbulent environment (e.g. industry crisis) or financial problems
3. concerns the future (*ex ante* analysis), leading to the development of the company and obtaining a state of competitiveness.

Historical reporting is based on indicators of financial analysis, working capital and change dynamics of individual cost categories. Based on that, guidelines for financial management of a company in crisis arise. The aim is to stabilize the financial situation. Maintaining the continuity of the company's operation is accomplished through a number of key indicators and tools indicated in figure 1. and is based to a large extent on debt management (so-called overdue liabilities) and improvement and maintenance of the financial liquidity of the organization. At the same time, in this area measures must be taken to secure the chief management from liability with all of their assets for the company's liabilities in the situation of failing to submit a bankruptcy petition within the deadline[1] [Adamus 2015, pp. 36–44]. Along with the company's financial problems, conclusions are drawn that allow for focusing efforts to rebuild the deteriorated production potential and increase the competitive position on the market. The key indicators and tools at this stage are: hourly rate, share of remuneration costs in total costs, share of external services in project costs, projected break-even point and balance of limits of guarantee and factoring products (activities of the financial intermediaries sector). On the basis of this comprehensive analysis and thanks to the continuous collection of data, the financial situation is evaluated using historical reporting. The goal in this case is to secure a good financial situation, to prepare for the next downturn on the market and to further develop the company.

[1] E.g. in the case of Polish legal organization form called „spółka z ograniczoną odpowiedzialnością".

Figure 1. Financial controlling model for service enterprises



Source: own elaboration.

Key areas of activity of financial intermediaries for service companies after the industry crisis

Financial intermediation in the activity of service enterprises is usually focused on the search for new sources of financing of the business activity. In the case of organizations facing the consequences of the crisis, obtaining new loans and credits may not only be unreasonable, but also impossible, as a result of a negative assessment of creditworthiness and low financial rating [Sierpińska, Wędzki 1997, p. 7]. A solution that may, however, support the activities of this type of companies are products such as factoring and related products. Financial intermediation should in this situation take into account the specificity of the industry in which the enterprise operates. For example, service companies in the construction industry are characterized by the fact that their main contracting entities are public administration units of various levels. Thus, projects are mostly obtained from the public procurement market, which means that it is necessary to start in public tenders. Among the requirements to start in tenders, in particular for larger projects (e.g. over PLN 100,000), one of the most common requirements is to performance guarantee, and then, after winning the tender and with the signing of the contract, a bid deposit. While the tender deposit usually falls within the financial possibilities of even small enterprises, the performance guarantee usually equals 5–10% of the contract value and is usually paid for the period longer than the timeframe of the project, but also until the end of the warranty period (e.g. 5 years after the completion of the project). Few companies in a difficult financial situation can freeze such value financial capital for such a long period of time. Therefore, organizations dealing with financial and insurance intermediation from the perspectives of the companies in question, have the greatest significance in terms of the possibility of granting tender guarantees and bid deposits. In addition, the average payment period for projects implemented for public administration equals 30 days. The use of products such as factoring means the improvement of receivables turnover and the increase of financial liquidity through the almost immediate receipt of a significant part of the amounts from issued invoices. In a situation of low liquidity, such products and the analysis of the use of assigned limits becomes one of the key tools for the company's survival on the market.

Final remarks and summary

The financial controlling of a service enterprise requires, above all, capturing changes taking place in the sphere of intangible production with a highly knowledge-intensive nature. Social capital, which is the main source of competitive advantage, can develop only if it is supported by financial resources. Industry crises are a cyclical phenomenon occurring in the economy and although they may have different sources and course, the process of financial controlling is similar, regardless of the type of service activity. This article was aimed at identifying and systematizing key indicators and tools used in service enterprises in the form of a financial controlling model. The model, based on three-time perspectives, indicates that the objectives of the activity, indicated by managers, varies accordingly with the changes in the financial condition of a company. Therefore, indicators and tools will be different depending on the financial situation of the organization and industry. Indicators and tools will also have a utilitarian character depending on the purpose for which they have been used. The process of financial controlling of service enterprises requires in particular a systemic and holistic approach to the so-called analysis of a financial condition. In the situation of industry crises, it is necessary to build entrepreneurs' awareness of the available tools and reporting on their activities, so that the decisions they make have a source not only in important business intuition, but also on the basis of quantitative methods. Financial intermediation in the context of the functioning of service enterprises should to a greater extent adapt its product offer to different industry conditions (like construction industry mentioned) and make the type of support dependent on the stages of development and financial condition of enterprises.

This scientific issue can be developed in the course of further research, e.g. in the area of matching individual tools and indicators to the specifics of individual industries. An interesting area of research would also be to determine the degree of implementation of similar models of financial controlling depending on the size of the enterprise, its operating time on the market, industry, along with a reference to financial results. Undoubtedly, further exploration is also the subject of the industry economic crisis that appeared on the construction market in 2012–2018 and its cyclicality, resulting in the largest extent from the prospects for financing investments from European Union funds.

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